

CLAIMS

What is claimed is:

1. A system that facilitates free form digital inking, comprising:
an annotation management component that generates a zoomable inking region for a digital document; and
a navigation component that dynamically adjusts a size and a shape of the zoomable inking region while a user annotates the digital document.
2. The system of claim 1, wherein the annotation management component is invoked to generate the zoomable inking region by identifying a point of interest on the digital document by at least one of a manual and an automatic technique.
3. The system of claim 1, wherein the zoomable inking region is generated in connection with animation that makes it appear the zoomable inking region grows out of the digital document.
4. The system of claim 1, wherein the zoomable inking region is generated to cover a subset of the digital document such that the remaining document can be concurrently viewed.
5. The system of claim 1, wherein the zoomable inking region magnifies the portion of the digital document within the zoomable inking region.
6. The system of claim 5, wherein the magnification factor is defined such that the user inks at a similar size to document information.
7. The system of claim 1, wherein the zoomable inking region is closed via one of a digital pen, a mouse, a button and voice activation.

8. The system of claim 1, wherein inking within the zoomable inking region scales down to a size similar to the text within the digital document when the zoomable inking region is closed.
9. The system of claim 1, wherein the navigation component employs one or more of a move zoomable inking region, a move digital document and a create space technique to navigate through the digital document.
10. The system of claim 9, wherein the move zoomable inking region, move digital document and create space techniques are based on a space-scale framework.
11. The system of claim 10, wherein the space-scale framework defines navigation via the following equation: $Z_C = O(1 - \alpha) + S_C\alpha$, wherein Z_C is a zoom center, O is a zoom origin, α is a scaling factor, and S_C is a screen center.
12. The system of claim 11, wherein the scaling factor is defined by: $\alpha = |Z| / |S|$, wherein $|Z|$ is an absolute value of a zoom region and $|S|$ is an absolute value of a source window.
13. The system of claim 1, wherein an orientation of the zoomable inking region is determined via moving a digital pen across the document in one of a right-to-left, a left-to-right, a top-to-bottom, and a bottom-to-top manner.
14. A method that provides a zoom window to annotate digital documents with digital ink, comprising:
 - generating the zoom window;
 - scaling contents displayed in the zoom window;
 - positioning the zoom window over an area of interest; and
 - automatically navigating the zoom window while annotating the document.

15. The method of claim 14 further comprising scaling down the document contents and the annotations displayed in the zoom window to a size in line with the text in the document being annotated.
16. The method of claim 14 further comprising defining a shape and a location of the zoom window via indicating a point in the document with at least one of a digital pen, a button, a mouse and voice activation.
17. The method of claim 14 further comprising animating generation of the zoom window to create an appearance that the zoom window grows out of the document.
18. The method of claim 14 further comprising employing a space-scale technique to navigate the zoom window.
19. The method of claim 14 further comprising magnifying the zoom window such that the user can add annotations that are similar in size to the document information displayed within the zoom window.
20. A system that facilitates electronic document annotating, comprising:
 - means for generating an annotation window for an electronic document;
 - means for defining a location of the annotation window
 - means for magnifying contents of the annotation window;
 - means for employing the annotation window to annotate the electronic document;and
 - means for dynamically adjusting the annotation window concurrently with annotating the electronic document.